

**Notice of Allowability**

Application No.

10/802,713

Examiner

F. L. Evans

Applicant(s)

NELSON, NEIL R.

Art Unit

2877

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the papers filed on March 17, 2004.
2. ☒ The allowed claim(s) is/are 1-9.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>0804</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                           | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

## **DETAILED ACTION**

### ***The Information Disclosure Statement***

The prior art cited in the information disclosure statement filed on August 24, 2004 has been considered.

### ***Additional Prior Art***

Fateley et al (US 6,859,275) and Jovin et al (US 6,128,007) disclose spectrally programmable light sources comprising a diffraction grating and a DMA. Attention is directed to Fig. 17 of Fateley et al and the text under the heading "Spectrally Programmable Light Source (PLS)" in columns 9 and 10 of Jovin et al.

### ***Allowable Subject Matter***

Claims 1-9 are allowed over the prior art of record.

### ***Examiner's Statement of Reasons for Allowance***

The following is an examiner's statement of reasons for allowance:

As to independent claim 1, the prior art of record, taken alone or in combination, fails to disclose or render obvious a hyperspectral scene generator comprising a controller for controllably moving each of the mirrors of the mirror array for selectively reflecting the spectral band directed to the corresponding mirror location, wherein the controller receives scene data representative of a simulated scene having a plurality of scene locations and wherein each of the scene locations includes at least one spectral band at a predetermined power level, wherein the controller generates, based on the scene data, control signals for selectively moving the mirrors of the mirror array such that the mirrors located in a same row of the array selectively reflect the directed spectral bands corresponding to the spectral bands associated with a scene location of the simulated scene, in combination with the rest of the limitations of the claim.

As to independent claim 9, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method of generating a hyperspectral scene comprising the steps of controllably

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moving each of the mirrors of the mirror array for selectively reflecting the spectral band directed to the corresponding mirror location, wherein the mirrors of the array are controllably moved to the first and second positions based on scene data representative of a simulation scene having a plurality of scene locations and wherein each of the scene locations includes at least one spectral band at a predetermined power level and projecting the spectral bands reflected by the mirrors in a same row of the array to a predetermined projection location, wherein each of the rows of mirrors in the array corresponds to a different predetermined projection location, in combination with the rest of the limitations of the claim.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Fax/Telephone Numbers*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner whose telephone number is (571) 272-2414.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**F. L. EVANS**  
**PRIMARY EXAMINER**  
**ART UNIT 2877**

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April 13, 2006